UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/810,564	LUECK, MICHAEL F.
	Examiner	Art Unit
	PARAS SHAH	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 September 2009</u>.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,3-10 and 12-26</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1,3-10 and 12-26</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20090911

DETAILED ACTION

1.   This Office Action is in response to the Amendments and Arguments filed on

09/01/2009. Claims 1, 3-10, 12-26 remain pending. The Applicants' amendment and

remarks have been carefully considered, but they are not persuasive. Accordingly, this

Action has been made FINAL.

2.   All previous objections and rejections directed to the Applicant's disclosure and

claims not discussed in this Office Action have been withdrawn by the Examiner.

Response to Amendments and Arguments

3.   Applicant's arguments filed 09/01/2009 with respect to claims 1, 3-10, and 12-26

have been fully considered but they are not persuasive for the reasons noted below.

With respect to the newly amended limitations in claims 1 and 20, in order to

overcome the 35 USC 101 rejections, have been considered. However, upon further

consideration a new 112, 1st paragraph rejection has been made for new matter. Please

see below for explanation.

With respect to the 35 USC 103 rejections, the Applicants provide responses to

the response to Arguments made in the prior action. However, these arguments are not

persuasive and will be addressed in light of the additional arguments on pages 13-17 of

the Applicant's Remarks. The Applicants, on page 14, assert that Hummel does not

determine a contextual state of a word. The Examiner respectfully disagrees with this

assertion. Hummel, in col. 4, lines 2-8 and lines 18-23, specifically describes the use of

context and surrounding information for the determination of the placeable. Hence, the

placeable determined varies based on context in order to translate the detected

placeable correctly in the target form. The claims recite the word being read from a word

list and identifying a contextual state of the word. The claim does not recite the

contextual state is determined based on multiple words or words surrounding the word

being read. The broadest reasonable interpretation allows context information to be

identified for that word based on information designated for translation (i.e. sentence

(e.g. where the sentence contains words making up a word list)). Hummel teaches this

identification of contextual state, which is the placeable type, for the specific context or

environment (see col. 6, lines 65-col. 7, lines 7), hence for the example of date, the

knowledge of the day and month is needed to be determined for the correct placeable to

be translated (see col. 7, lines 10-17) . The Applicants have not provided a specific

definition of the contextual state and thus is able to be broadly interpreted. Furthermore,

the Applicant asserts that viewing of each character of a token does not indicate that

context is used and asserts that there is no indication that meaning of a part of a token

is determined by considering other parts of a token. The Examiner disagrees with these

assertions. The viewing of each character in a token in col. 7, lines 43-53 does indicate

context is being used. For example, the date example, in col. 7, line 15, multiple entities

exist. Specifically, 25th and January. In order to determine the type of placeable the 25

needs to be known in order to determine the *long form* date of is being invoked as

opposed to speed or name information. 25 and January is associated with date (see

Figure 4, 410, 420, for long date). This is the context, specifically the surrounding

information (i.e. in this case left context (which is numerical)), which is in accordance

with the definition provided in the prior action. Hence, part of token is used (i.e. part of

first character information constituting a number) in determining the *long form* of date

(e.g. The combined characters (25th and January) results in a meaning of date

information and not speed or name information, where the knowledge of the number 25

indicates either speed and numerical and rules out name information). The fact that the

entire token is not viewed as pointed by the Applicant on page 11 is irrelevant since the

information prior to the termination is used for type of placeable determination. Further,

the dividing of the token does imply considering of parts of the token since Hummel

uses this character by character analysis of the token to determine the placeable type

needed for the transformation (see col. 7, lines 50-52 and Figures 4).

The Applicant on page 15 further argues that context is not identified

dynamically. The Examiner disagrees with this assertion. The usage of character

information in Hummel is dynamic, where the character context being read determines

the type of placeable based on the previous characters that have been analyzed (see

Figure 4, and col. 7, lines 50-57). This can be seen when distinguishing between date

information, speed information, and name information. Further, the Applicant asserts

that the fact that each character of a token is viewed does not indicate that context is

determined. The Examiner disagrees with this assertion. The Applicant gives an

example that when a particular pattern is found that fits a placeable then determination

can be made for the token. This particular pattern serves as context information,

contrary to the Applicant's arguments since the pattern constitutes a series of

characters which are looked upon for the formulaic determination in order to distinguish

between a date, speed or name information. Thus, the prior portions of the characters

constitute context that sheds light on the meaning of the combined words of the token.

The Applicants on page 16, further assert that there is no evidence that Hummel

considers the meaning of one part of a token relative to another. The Examiner

respectfully disagrees with this assertion for the reasons as mentioned above parts of a

token are considered in order to determine the placeable. The claim recites the

identification of context information *for a word* and not consideration of meaning of one

word with respect to other words as argued as the word list as claimed can be broadly

interpreted to consist of one word.

Hence, for these reasons the Applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 1 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. Specifically the newly added limitations of "a

computer readable memory" and "a processor coupled to the computer readable

memory" recites subject matter which was not described in the original claims,

drawings, or Specification. The Applicant assert that paragraphs [0035], [0038], [0041],

and [0050] implies the use of a computer readable storage medium, the use of a

process can be inferred from the discussion of software, and the use of a GUI implies

the use of hardware and software. The Examiner respectfully disagrees with this

assertion. The Applicants have noted that the Specification includes discussion of

software (i.e. hence no discussion of hardware). Furthermore, Applicant has not been

able to provide support where such limitations have been described in the Specification

and relies on implied teachings. However, these teachings are not implied since a

software discussion is being described as claimed at the time of filing of the Application,

not directed to the combination of software and hardware.

6.   Claims 3-9 and 21-26 are rejected for being dependent upon a rejected base

claim.

Claim Objections

7.   Claims 3, 4, 7, 8, 22, 23, and 26 objected to because of the following

informalities: The Applicant cancelled the "working list module" and "formatting module"

limitations from the independent claims but the dependent claims still recites these

features. The limitations, which were cancelled, should be deleted and added with

limitations that reflect the step from which the respective modules were previously used

for in order to properly associate the limitations contained in the mentioned dependent

claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   **Claims 1, 3-10, 12-26** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Alleva et al., Patent No. US 5,970,449 ("ALLEVA") in view of Hummel

et al., Patent No. US 7,020,601 ("HUMMEL").

10.   Regarding **claim 1**, ALLEVA teaches a configurable formatting system for

generating a desired representation of an expression within a word list ("a context-free

grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60),

said system comprising:

(a) a computer readable memory (see Figure 1, primary storage 28 and secondary

storage 30 and col. 3, lines 38-47) for storing:

        a dictionary database ("context-free grammar 40", ALLEVA, column 5, line 26) for

storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

        a configuration file containing at least one variant to the contents of at least one

category of the dictionary database ("the text file may be merely edited", ALLEVA,

column 8, lines 54-55), said variant to the contents of at least one category being used

to overwrite the contents of said at least one category within said dictionary database

("the tree is revised accordingly by reading the contents from the edited text file altering

the tree in a matching fashion", ALLEVA, column 8, lines 58-60);

(b) a processor coupled to the computer readable memory (see Figure 1, CPU 12

connected to primary memory and secondary memory), the processor configured to

(see col. 3, lines 18-20, where computer system practices the embodiment)

reading a word from the word list ("words are stored within a text buffer 122 that

is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining

whether the word is associated with the expression by utilizing the categories of said

dictionary database for said word ("processed by the text normalizer to determine

whether there are any matching rules or not", ALLEVA, column 8, lines 6-7):

inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

processing the working list when the word is associated with the

termination of the expression ("a rule will be applied when at least a complete rule has

been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines

52-54, see also column 8, lines 1-27 for an example); and

generating the desired representation of the expression from the working list (see

ALLEVA, column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches storing (see col. 6,

lines 1, translation memory and see col. 7, lines 22-34, and lines 43-52, the use of a

cache memory is implied as each character is examined of a token to determine the

placeable) a contextual state (see Figure 4 and col. 7, lines 51-53, determination of a

placeable occurs character by character); identifying the contextual state of a word

(placeable determined based on context and environment, HUMMEL, column 4, lines 3-

10 and see col. 4, lines 23-26, placeable is identified in order to facilitate subsequent

handling and see col.7, lines 25-31, 44-51, the determination of a date is determined

using views of the entire token) (e.g. The said identifying is dynamic where each

placeable is identified and converted based on determiner placeable type.) and

determining whether a word is associated with the expression utilizing the contextual

state (see col. 7, lines 44-51, where state is determined by looking at the entire token.

Further, in order to determine the type of conversion needed the next token is viewed,

thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made check the context as taught by HUMMEL on the

normalizations used by ALLEVA in order to improve the translation of data not requiring

translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16

and lines 60-67)

11.   Regarding **claim 3**, ALLEVA further teaches that the working list module is either

in a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, working list module is in a NoCheck state (see ALLEVA, FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an example).

12.   Regarding **claim 4**, ALLEVA further teaches that said working list module is further determines whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordInNumber state ('the number rule 128 is applied to replace 'twenty' with '20'", ALLEVA, column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral ("the first word, 'five,' is processed … there will be a match within the digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see ALLEVA, FIG. 9).

13.   Regarding **claim 5**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character ("if a period is followed by a space, two spaces are to be substituted for the single space", ALLEVA, column 5, lines 49-52).

14.   Regarding **claim 6**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database ("before applying the rule, the text normalizer 38 looks at the next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", ALLEVA, column 8, lines 8-11).

15.   Regarding **claim 7**, ALLEVA further teaches that said formatting module looks up the category associated with a word within the dictionary database (see ALLEVA, FIG. 9, rules 126, 128, and 130).

16.   Regarding **claim 8**, ALLEVA further teaches that said formatting module formats the word according to the translation rule associated with the category associated with the word (see ALLEVA, FIG. 9).

17.   Regarding **claim 9**, ALLEVA further teaches that the category for the word is used to format the word in association with another word within working list ("the system

seeks to apply the rule that will normalize the greatest length string within the text",

ALLEVA, column 7, lines 48-49, see also column 8, lines 1-27 for an example).

18.   Regarding **claim 10**, ALLEVA teaches a configurable formatting method for

generating a representation of an expression within a recognized word list ("a context-

free grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-

60), said method comprising:

(a) storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33) in a dictionary database

("context-free grammar 40", ALLEVA, column 5, line 26), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

(b) storing at least one variant to the contents of at least one category of the

dictionary database in a configuration file ("the text file may be merely edited", ALLEVA,

column 8, lines 54-55) and using the contents of at least one category to overwrite the

contents of said at least one category within said dictionary database ("the tree is

revised accordingly by reading the contents from the edited text file altering the tree in a

matching fashion", ALLEVA, column 8, lines 58-60);

(c) reading a word from the word list ("words are stored within a text buffer 122

that is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining

whether the word is associated with the expression by utilizing the categories of said

dictionary database ("processed by the text normalizer to determine whether there are

any matching rules or not", ALLEVA, column 8, lines 6-7);

(d) inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(e) processing the working list when a word is associated with the termination of

the expression ("a rule will be applied when at least a complete rule has been identified

and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see

also ALLEVA, column 8, lines 1-27 for an example); and

(f) formatting the words from the working list and generating the desired

representation of the expression from the working list (see ALLEVA, column 8, lines 1-

27, FIG. 9, the text normalizer 38 applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches identifying the

contextual state of a word (placeable determined based on context and environment,

HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in

order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the

determination of a date is determined using views of the entire token) (e.g. The said

identifying is dynamic where each placeable is identified and converted based on

determiner placeable type.) and determining whether a word is associated with the

expression utilizing the contextual state (see col. 7, lines 44-51, where state is

determined by looking at the entire token. Further, in order to determine the type of

conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made check the context as taught by HUMMEL on the

normalizations used by ALLEVA in order to improve the translation of data not requiring

translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16

and lines 60-67).

19.   Regarding **claim 12**, ALLEVA further teaches that (c) further comprises moving

between a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, being in a NoCheck state (see FIG. 7, node 100);

(ii) entering into a WordInNumber state when the word being read is associated

with the expression (see FIG. 7, node 102); and

(iii) returning to the NoCheck state when the word being read is associated with

the termination of the expression ("a rule will be applied when at least a complete rule

has been identified and no further portion of a rule can be applied", column 7, lines 52-

54, see also column 8, lines 1-27 for an example).

20.   Regarding **claim 13**, ALLEVA further teaches that (c) further comprises:

(iv) determining whether the working list module is in the WordInNumber state

('the number rule 128 is applied to replace 'twenty' with '20'", column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the

word is a numeral ("the first word, 'five,' is processed ... there will be a match within the

digit rule 126 for this word", column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the

expression (see FIG. 9).

21.   Regarding **claim 14**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is a punctuation character ("if a period is

followed by a space, two spaces are to be substituted for the single space", column 5,

lines 49-52).

22.   Regarding **claim 15**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is not present within any of the categories

of the dictionary database ("before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text

normalizer 38 knows that it is done", column 8, lines 8-11).

23.   Regarding **claim 16**, ALLEVA further teaches that (f) further comprises looking

up the category associated with a word within the dictionary database (see FIG. 9, rules

126, 128, and 130).

24.   Regarding **claim 17**, ALLEVA further teaches that the category associated with

the word is used to format the word in association with another word within working list

("the system seeks to apply the rule that will normalize the greatest length string within

the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

25.   Regarding **claim 18**, HUMMEL further teaches that list module is further adapted

to determine whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

26.   Regarding **claim 19**, HUMMEL further teaches that (c) further comprises

determining whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

27.   Regarding **claim 20**, ALLEVA teaches a configurable formatting system for

generating a desired representation of an expression within a word list ("a context-free

grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60),

said system comprising:

(a) a computer readable memory (see Figure 1, primary storage 28 and secondary

storage 30 and col. 3, lines 38-47) for storing:

    a dictionary database ("context-free grammar 40", ALLEVA, column 5, line 26) for

storing at least one category ("divided into three major sections ... '[spacing]',

'[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at

least one word and at least one translation rule ("includes substitute text 54 that

replaces the text that was output", ALLEVA, column 4, lines 56-57);

    a configuration file containing at least one variant to the contents of at least one

category of the dictionary database ("the text file may be merely edited", ALLEVA,

column 8, lines 54-55), said variant to the contents of at least one category being used

to overwrite the contents of said at least one category within said dictionary database

("the tree is revised accordingly by reading the contents from the edited text file altering

the tree in a matching fashion", ALLEVA, column 8, lines 58-60);

(b) a processor coupled to the computer readable memory (see Figure 1, CPU 12

connected to primary memory and secondary memory), the processor configured to

(see col. 3, lines 18-20, where computer system practices the embodiment)

    reading a word from the word list ("words are stored within a text buffer 122 that

is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining

whether a word is associated with the expression by utilizing the categories of said

dictionary database for said word ("processed by the text normalizer to determine

whether there are any matching rules or not", ALLEVA, column 8, lines 6-7):

inserting the word into a working list if the word is associated with the

expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(processing the working list when the word is associated with the

termination of the expression ("a rule will be applied when at least a complete rule has

been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines

52-54, see also column 8, lines 1-27 for an example); and

generating the desired representation of the expression from the working list (see

ALLEVA column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules) by

looking up the category associated with a word within the dictionary database (see

ALLEVA, FIG. 9, rules 126, 128, and 130).

However, ALLEVA does not disclose dynamically identifying the contextual state

of a word.

In the same field of text normalization, HUMMEL teaches a contextual state (see

Figure 4 and col. 7, lines 51-53, determination of a placeable occurs character by

character); identifying the contextual state of a word (placeable determined based on

context and environment, HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26,

placeable is identified in order to facilitate subsequent handling and see col.7, lines 25-

31, 44-51, the determination of a date is determined using views of the entire token)

(e.g. The said identifying is dynamic where each placeable is identified and converted

based on determiner placeable type.) and determining whether a word is associated

with the expression utilizing the contextual state (see col. 7, lines 44-51, where state is

determined by looking at the entire token. Further, in order to determine the type of

conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made check the context as taught by HUMMEL on the

normalizations used by ALLEVA in order to improve the translation of data not requiring

translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16

and lines 60-67).

28.   Regarding **claim 21**, ALLEVA further teaches that the category associated with

the word is used to format the word in association with another word within working list

("the system seeks to apply the rule that will normalize the greatest length string within

the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

29.   Regarding **claim 22**, ALLEVA further teaches that the working list module is

either in a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, working list module is in a NoCheck state (see

ALLEVA, FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being

read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is

associated with the termination of the expression ("a rule will be applied when at least a

complete rule has been identified and no further portion of a rule can be applied",

ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an

example).

30.   Regarding **claim 23**, ALLEVA further teaches that said working list module is

further determines whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordInNumber state ('the

number rule 128 is applied to replace 'twenty' with '20'", ALLEVA, column 8, lines 23-

24);

        (v) determining whether the working list module is in the NoCheck state and the

word is a numeral ("the first word, 'five,' is processed … there will be a match within the

digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

        (vi) if either (iv) or (v) is true then determining that the word is associated with the

expression (see ALLEVA, FIG. 9).

31.   Regarding **claim 24**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is a punctuation character ("if a period is

followed by a space, two spaces are to be substituted for the single space", column 5,

lines 49-52).

32.   Regarding **claim 25**, ALLEVA further teaches that the word is associated with the

termination of an expression when the word is not present within any of the categories

of the dictionary database ("before applying the rule, the text normalizer 38 looks at the

next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text

normalizer 38 knows that it is done", column 8, lines 8-11).

33. Regarding **claim 26**, HUMMEL further teaches that (c) further comprises

determining whether the working list module is in the WordInNumber state or NoCheck

state by utilizing a context indicia, where said context indicia tracks the contextual state

of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines

the contextual state of the word) (e.g. The contextual state of the word is tracked by

viewing the entire token for placeable type determination.).

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

35. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PARAS SHAH whose telephone number is (571)270-

1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m.

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on (571)272-7843843. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

                                          /David R Hudspeth/
                                          Supervisory Patent Examiner, Art Unit 2626
/Paras Shah/
Examiner, Art Unit 2626

12/01/2009